

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Holy Trinity Cemetery - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: POLREP #10
Holy Trinity Cemetery
A23M
Lewiston, NY
Latitude: 43.1493290 Longitude: -79.0318090

To: Walter Mugdan, USEPA Region 02
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Date: 7/14/2017

Reporting Period: 06/08/2017 through 07/15/2017

1. Introduction

1.1 Background

Site Number:	A23M	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/6/2016	Start Date:	4/6/2016
Demob Date:		Completion Date:	
CERCLIS ID:	NYN000206698	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Removal Assessment and Removal Action

1.1.2 Site Description

The Site is located at Holy Trinity Cemetery in Lewiston, New York. The overall property is approximately 31.5 acres in size and is owned by Divine Mercy Roman Catholic Parish of Niagara Falls NY. The main area (Area 1) of observed contamination is 2.91 acres. Area 1 is located in the northwestern portion of the property on a relatively flat and slightly elevated grassy field, as well as on existing roadbeds. Another area of identified contamination is on the southeastern part of the property. This area is approximately 0.5 acres in size. There is one building on site, which is utilized both as a residence and cemetery maintenance facility. The HTC site is bordered: to the north and east by Interstate 190; to the south by the Gates of Heaven Cemetery; and to the west by Robert Avenue and a residential area.

1.1.2.1 Location

5401 Roberts Avenue, Lewiston, NY 14092

1.1.2.2 Description of Threat

Unsecured radioactive slag material in a publically accessible property. The contaminants of concern are Radium-226 and Radium-228.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In a 1978 U.S. Department of Energy aerial radiological survey, more than 15 properties throughout the region were identified as having elevated levels of radiation above background. It is believed that, in the early 1960s, slag from the local Union Carbide facility was used as fill on the properties prior to paving. The slag contained sufficient quantities of uranium and thorium to be classified as a licensable radioactive source material. Union Carbide subsequently obtained a license from the Atomic Energy Commission (now the Nuclear Regulatory Commission) and the State of New York; however, the slag had been used as fill throughout the Niagara Falls region prior to licensing. Based on the original survey and subsequent investigations, it is believed that the radioactive Union Carbide slag was deposited at the Holy Trinity Cemetery property.

In February 1980, the New York State Department of Health Bureau of Radiological Health and the Niagara County Health Department conducted a radiological survey of the HTC site to identify areas of elevated radioactivity as a result of radioactive slag having been used on the property for fill. The survey was conducted based on information that the slag used at the cemetery was from the same source used at two other locations in nearby Niagara Falls, which had been identified by the NYSDOH as containing elevated levels of radioactivity. During the survey, cemetery personnel showed NYSDOH a slag pile located near the caretaker's garage in the western portion of the property. Cemetery personnel stated that this slag was used as fill for the cemetery roads throughout the property.

Additionally, the slag was used as fill for the base of two proposed roadbeds that extended approximately 500 to 600 feet from the caretaker's garage northwest toward Robert Avenue. At the time of the survey, the construction of these roads had been abandoned. The underlying slag base was covered with an unknown amount of soil and was left as an open field.

In October 2006, the New York State Department of Environmental Conservation and the Niagara County Health Department conducted a site visit at HTC. At that time, the slag pile that previously had been observed near the caretaker's garage was no longer on site; the current caretaker had neither knowledge of the slag pile, nor what happened to it. The caretaker also indicated that children living nearby use this area for recreation. Since the 1980 NYSDOH site investigation, trees had grown through the abandoned slag roadbeds, pushing the slag to the surface.

In May 2007, NYSDEC visited the site to identify contamination in an on-site debris pile using gamma-ray spectroscopy. A 5-minute static reading was taken; radium-226 was the only nuclide identified. An additional similar analysis was conducted on one of the roadbeds, confirming the presence of thorium-232.

During a reconnaissance performed by the NYSDOH and NYSDEC in July 2013, screening activities showed radiation levels at the HTC site along the roadway and along the back roadway leading to offsite with radiation levels up to 51 µR/hr in the roadway with the pressurized ion chamber (PIC) and up to 50,000 cpm with the sodium iodide (NaI) 2x2 detector.

The Holy Trinity Cemetery Site (Site) was referred to the EPA by the NYSDEC and NYSDOH on July 21, 2013. No other removal actions have been taken by other government or private parties prior to this request.

From December 2013 through May 2014, EPA Pre-Remedial conducted preliminary assessment at the Site. The program concluded that the Site did not meet the minimum criteria to be eligible for the inclusion on the EPA National Priorities List (NPL) for remediation. However, it was decided that there was a need for EPA to perform further assessment at the Site to determine if an action under the Removal Program is warranted.

In August 2015, the USEPA Region 2 Removal Program, Health Physicist Nguyen and Weston conducted further radiological assessment of the interior and exterior of the property. The goal for this assessment was to determine the extent of contamination (i.e. how far does the contamination extend beyond the contamination area of concern determined by Pre-Remedial Program), as well as, determine interior contamination impacts (i.e. are workers/patrons exposed to elevated levels of radon/thoron or loose contamination). The outside areas of gamma contaminated material were verified and perimeter identified. There were no elevated gamma or radon levels in the building.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

From May 08, 2017 through July 15, 2017 the following tasks/events occurred:

May 8, 2017 through May 19, 2017

- Soil Pit Sampling in various areas throughout HTC Site.
- Conducted indoor gamma survey in residences at Areas 6 & 7
- Performed radon sampling in residences at Areas 6 & 7.
- Completed gamma survey of northern portion of Area 1.

June 8, 2017 through July 15, 2017

- Gamma survey results showed background levels at Area 6 & 7 residences with the exception of Area 7 garage concrete floor.
- All radon results obtained from the residences at Areas 5, 6, & 7 were below action limits.
- Throughout this time range, OSC Lisichenko has overseen Weston analyzing the HTC soil/slag samples via the HPGe.

2.1.2 Response Actions to Date

- In April 2016, permanent fence was installed around Area 1.
- On June 5, 2016, the radon mitigation system was installed at Area 5 residence.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

EPA Enforcement team is actively researching Potentially Responsible Parties

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

- HTC soil /slag samples will be analyzed on HPGe.
- HTC soil /slag samples analyzed by certified laboratory.

USEPA has been coordinating with NYS, Niagara County and local representatives throughout the assessment/removal process.

2.2.1.1 Planned Response Activities

No planned response activities

2.2.1.2 Next Steps

Action Memo Finalization.

2.2.2 Issues

Lack of funding

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

On March 24, 2016, ERRD Director granted a verbal authorization in the amount of \$150,000.00 with \$120,900.00 for mitigation to conduct an emergency CERCLA Removal Action.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$120,900.00	\$71,590.49	\$49,309.51	40.79%
TAT/START	\$29,100.00	\$23,039.55	\$6,060.45	20.83%
Intramural Costs				
Total Site Costs	\$150,000.00	\$94,630.04	\$55,369.96	36.91%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

OSC
Weston (1)

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.